

Once upon a time in the United States of America there was a silly old custom that only girls were taught to cook. And they were only taught so that when they grew up they could catch a husband.



And Mama could retire to her rocking chair or her kitchen in peace and not have to worry about her offspring, except on special occasions.



Daughter would then restart the cycle of cooking, cleaning, and managing the kids.



Father's main role in the kitchen was reading the paper and asking when supper was going to be ready.



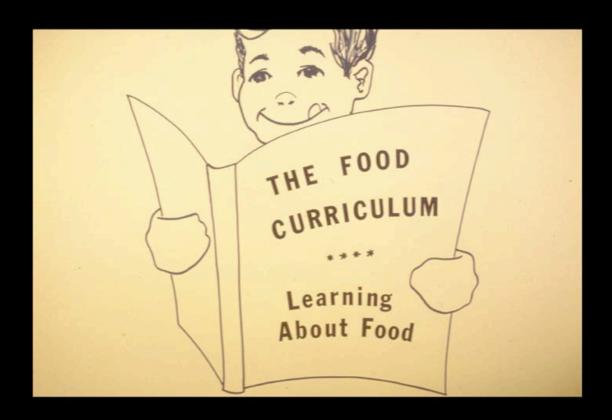
But modern times arrived with cake mixes, frozen dinners, and all sorts of fancy and easy to fix foods. Some girls never learned to cook at all.



And that was sad--because cooking is fun--and you learn a lot too.



So we are going to present a modern day story--where boys cook--and girls cook--and everyone cooks, eats, learns and had fun. The characters you will see in this slide set are all too young for kindergarden but boy will they be smart when



because, you see, they've had, "The Food Curriculum". If you don't know what curriculum means, that's just a fancy name for what you study, which in this case is food. Through the years we've learned a lot about children.



We have some pretty good ideas about how they learn and what skills they need to be successful. Perhaps the most important this we've learned is that children learn by doing and that they "do" what they find interesting.



Since all children are interested in eating they find cooking a highly motivation activity. Te preparation of food by itself has some learning value. But the child will learn much more if the teacher, parent, day-care provider, or other supervising adult is aware of the many possibilities for learning that are available in a simple cooking experience.



For example: Children learn through sensory experiences. One of their earliest ways of identifying items is by color. And what provides more color than the wide variety of foodstuffs, especially the fruits and vegetables?



Children learn early that green and yellow vegetables are good for them.



And they learn that apples can be red or yellow or green and still be apples. Color is important to children. And adults are wise to keep this in mind when planning menus for children.



Bright colors will attract the eye of even a small baby. Most school age children will choose red gelatin over any other regardless of flavor.



In addition color, children learn to identify food and other objects by shape. Lemons and limes are shaped like footballs, celery comes in long stalks, and green beans are long and skinny.



Still another way that children learn to identify objects is by size. To a child probably the most enormous food in the world is watermelon. They learn to recognize it quickly because it is so large.



An adult might play a game at the table with young children, such as: "I'm thinking of something on your plate and it's white and square. Can you guess what it is?" To the child who is secure in his knowledge of colors and shapes this game will be easy but to the child who is still learning these concepts, the game can be a very challenging learning experience. Children learn by looking and noting such things as color, shape, and size.

Copyright 2006 DLA. All rights reserved see http://spec.lib.vt.edu/policies/conditions.html for our conditions of use.



They also learn by tasting. Here some children were presented with a problem. Sugar and powdered milk had been measured into a bowl, but the teacher couldn't remember which was which. Who could tell her? After examining the boxes carefully Eric was stumped.



It was Angie who cautiously dipped her finger in the bowl for a taste and discovered which bowl held the sugar.



Soon the taste panel was in full swing! Children need to be presented with problem solving situations frequently. The most important skill they can ever develop is the ability to solve problems. Too often the teacher does all the work and thinking while the child just watches.



There is no better way to learn than by self-discovery. Angie is developing coordination as she holds the juicer with one hand and squeezes the lemon with the other.



She really is doing very well at this difficult task.



After squeezing the juice she decided to sample.



(MUSIC)



(MUSIC)



Boy! Was that a learning experience! Please note the absence of any adult to "teach" Angie that lemons are sour.



In addition to sight and taste children learn by smell. Our taste panel has decided to do a little experimenting with a pound of bacon. Slippery stuff, isn't it?



It takes a lot of cooperation to get this job done.



Do you suppose that these children know they might be dealing with descendants of the Three Little Pigs?



As the bacon gets hot and there is danger of grease popping the teaching arrives to provide the necessary assistance.



When she asked the children what they were cooking the reply was: "Bacon! Can't you smell?"



Another sensory experience food provides is the sense of touch. Eric and George have decided bacon is not for them. They want hamburgers for lunch.



Shaping them is not too difficult, though getting your fingers to do what you want them to do is a common problem with children.



Patting it hard seems to help some.



"But maybe if I just stood up I could get a little more weight on it. . ."



Food has all sorts of different "feel"-- some is slippery, some lumpy, some dry, and some wet. Children need many experiences in learning to develop their sense of touch. Kneading dough gives Stuart some manipulative experience.



The look of concentration on his face gives an indication of how challenging the project is.



"Hey, it doesn't stick to my hand anymore."



And now we learn dividing.



If you're really feeling brave have the children make pudding and let them fingerpaint with it.



The slippery, squishy feeling is fun. And clean-up? Well, just take a look!



(MUSIC)



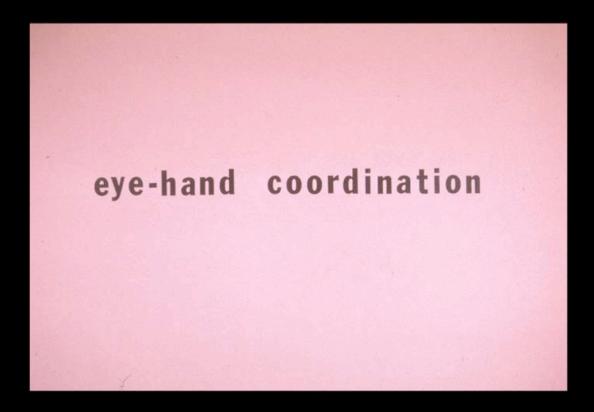
Another sense organ that provides us with learning is the ear. We learn through hearing. The sound of soup bubbling on the stove reinforces the meaning of the word boil. The child sees both what it looks like and how it sounds.



The pop and sizzle of fat dripping onto a charcoal fire points out what happens to fat when you heat it. There is an unmistakable sound that helps identify what frying means.



The crunch of fresh fruits and vegetables helps children identify them just as much as the flavor and color. And what would popcorn be without the "pop"?



In addition to the sensory experiences, many manipulative skills such as eye-hand coordination are taught by cooking and eating.



As children practice skills the teacher should provide the name for what they are doing. For example:



They learn how to scrub. It may be a tabletop they are trying to clean--which takes big sweeping movements.



Or they may be learning to scrub a sweet potato with a vegetable brush.



Children learn what it means to "tear" as they tear lettuce into small pieces for salad.



Pouring skills are developed through food activities.



Much learning is by trial and error!



If given the proper size pitcher with a small amount of milk, even a small child can pour his own milk or juice.



It gives children a very grown-up sense of independence and importance to be able to do things for themselves.



Another important skill is spreading. If children aren't given lots of experience at this they may grow perfectly content to have an adult do this for them until they're 19!



It's a difficult skill but anyone can figure out how to spread butter and jelly on their own biscuit.



Yum!



Cracking is another skill developing activity.



Cracking nuts keeps even the rowdiest in the group busy and seems to help drain feelings of hostility and aggression as well.



Paring vegetables, such as carrots, with a vegetable peeler, provides another chance to practice eye-hand coordination.



The children with need supervision, but once taught the correct procedure and safety rules most children are surprisingly cautious. They can even be trusted with large knives.



Other skill practice can be provided through snapping beans. . .



shucking corn. . .



cracking eggs...



mixing and stirring and literally hundreds of other experience connected with food and cooking. Perhaps the self-confidence these children are gaining will be as important to their future school success as the necessary eye-hand

Copyright 2006 DLA. Alights Sive the Asia Copyright 2006 DLA. Alights Si



Children can learn about time as well as nutrition in the kitchen. First of all children develop a gross sense of time from the passing seasons.



Their memories of seasons often stem from holidays, and the most outstanding thing about these holidays is the food. Thanksgiving means a turkey, Halloween means pumpkins, and the 4th of July means picnics. Once these gross discriminations of time have been made the child begins to understand smaller units.



The clock on the wall will run for hours and hours but this timer can only be set for one hour or less.



Which makes it just right for timing the muffins for 20 minutes.



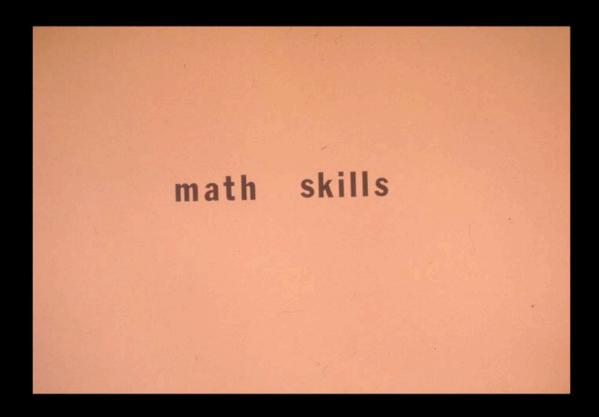
George wants to fix a soft-cooked egg and it should only cook three minutes.



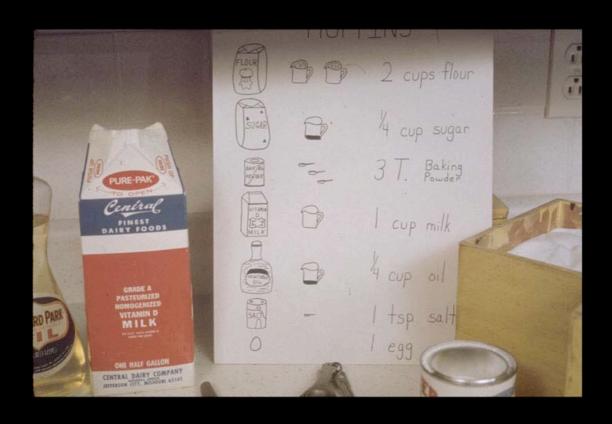
Which timer would work best?



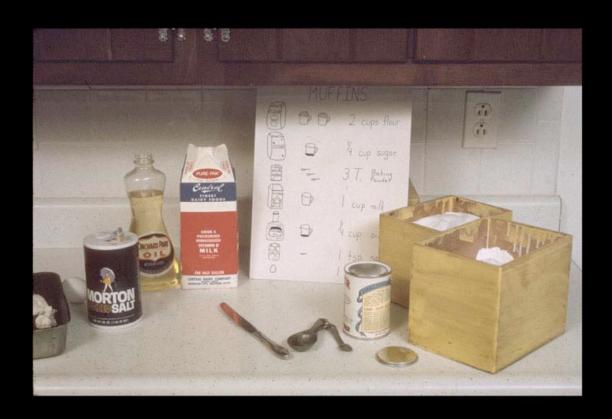
Hey, they picked the right one, a very special kind of clock that only runs for three minutes. After timing the egg the children are sure to have a better idea of how long three minutes is, don't you think?



Cooking also develops such math skills as measuring, dividing, and sequencing. As a review let's follow Stuart as he makes muffins.



Before a child can read words he can read pictures, so a special recipe card or poster with the words and pictures is a great help.



Gathering all the supplies and matching them to the list of ingredients is the first step.



Next comes measuring and Stuart can look at the pictures to tell how full the cups should be.



Measuring and leveling teaspoons and tablespoons may require some assistance; because a goof here could ruin the final product.



Pouring skill is required for measuring the milk.



A sponge should always be handy in case the cup turns out to be a "little short!"



Into the bater goes the milk.



Stuart has had lots of practice cracking eggs. With a less experienced child, breaking the egg in a separate small bowl might help avoid egg shells in the muffins.



Stuart learns a little science in the kitchen as he notices and talks about the egg changing form as it disappears into the batter. It will be still different after it is cooked.



No cook can resist sampling the batter before dividing it into the muffin cups.



Well, maybe even two samples!



It's important to provide children with experiences that help them learn about science. Simple little things, like helping them discover that steam is a form of water.



And that ice is also water. You can also discuss these new ideas with the children. Or pose it as a problem. "What will happen if we put this pan of water in the freezer-or leave it out in the snow overnight?"



Try hard to give children experiences to help them understand the origin of foodstuffs. Since most children live in the city and even few farmers milk cows by hand or raise chickens it becomes increasingly difficult to provide concrete copyright 2006@XPeriences.of.ethis.of.ypegrour conditions of use.



Today's child often thinks eggs come from cardboard cartons rather than chickens and that fishsticks grow on trees along with all other sticks.



First hand experiences you can provide include planting a garden so food can actually be seen growing. After picking a tomato from the plant the child should know that at least tomatoes don't grow in cardboard containers.



Even growing one stalk of corn will provide useful knowledge to the child who later shucks and eats it.

```
boil bake
mix stir
blend sift
peel grate
shuck
```

Cooking provides many opportunities for language development. Words such as boil, bake, mix, stir, blend, sift, peel, grate, and shuck become a part of children's vocabularies.



They learn that beating an egg has nothing to do with spanking it, nor does beating an egg have anything to do with being the first one to win a race. Children expand their vocabulary as they learn the names of the foods they eat and the meaning of the terms in the recipes they use.



They also develop such pre-reading skills as following pictures. And they learn to recognize packages which is a type of reading that precedes the reading of words. The first words some children read are those on the back of the

Copyright 2006 DLA Olfrica Kidasat //sea Kid



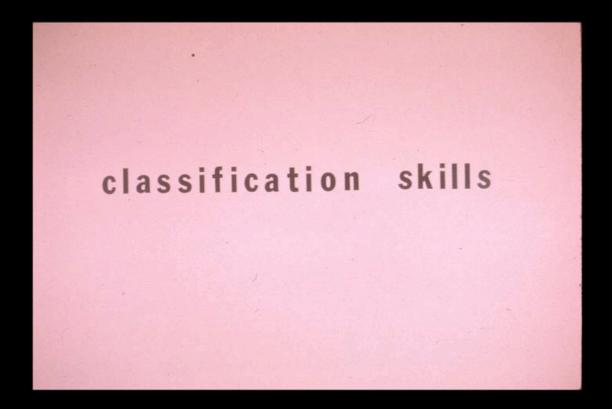
Cooking helps children learn to get ideas from books and to learn that books contain useful information



Food experiences provide the teacher with an opportunity to teach basic nutrition. Children can learn which foods help them grow and are good for them.



They can also learn what kinds of foods cause cavities and contain little food value.



Cognitive skills can be developed through cooking. As children cook and eat they learn simple classification skills such as: What is a fruit--and what is not. The difference between raw and cooked foods. Which foods grow under ground, on vines, trees, bushes and plants. And... Which are provided by animals and what animals provide them.



Here some children are learning about the different forms grapes come in.



They are learning that grape juice, raisins and fresh grapes all come from the grape.



Another day the children might actually want to put grapes in a saucer and set them in the sun to dry into raisins. Other simple experiments might include comparing the insides of fruits and nothing that citrus fruits are made of sections and other fruits are not. Preparing fruits in various ways could provide an endless number of enjoyable experiments.



Taking time out to explore a raw green bean may help a child whose only interest in beans as been in eating them.



Given a chance, she most certainly will discover the seeds and may wonder and ask about them thus opening the door to exploration.



There is almost no limit to the number of ideas and cognitive skills that can be developed through cooking. Equally valuable are the social skills that children develop.



Cooking experiences require children to share. They share not only food but clean-up duties



They learn to wait patiently and to take turns.



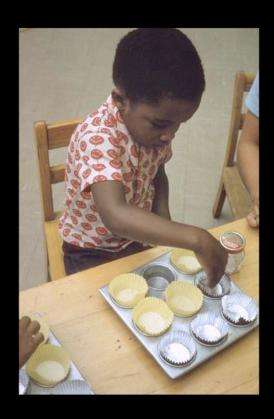
(MUSIC)



(MUSIC)



As they work they chatter, exchange ideas, solve problems and sample the products. Children working in groups must all learn to follow directions and tend to their task if their product is going to turn out.



Everyone has important responsibilities from George who puts the paper liners in the pan,...



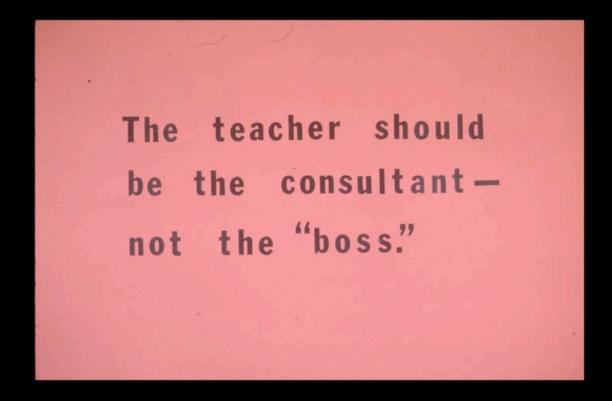
to Renae who mixes the batter,...



to Bridgit who carefully determines how much batter should go in each cup,...



to Amy and Jill who clean up the mess on the floor. Many other children have also helped from beginning to end and we're left out many of the steps. But please note, this is the children's project. The teacher only gives necessary



The teacher should be the consultant--not the "boss". Children learn very little when the teacher does all the work and they get only to stir once or twice and sample the final product.



Children who cook together learn teamwork. No teacher had to direct Brigit to help Kevin.



She and Renae could see he was in trouble and they had a vested interest in the outcome. The muffins belonged to everyone and Kevin's job of beating the eggs was vital to completing them.



Waiting for a turn is not so hard if you're assured you will get one.



Developing the secure atmosphere of knowing is a major function of the teaching staff. knowing you will get a turn. Knowing you will be able to participate and contribute if you want to. And also knowing you won't be forced to cook if you are busy investigating something else and don't want to cook.



The children you have seen are relaxed. They know that no one is going to yell at them if they spill or make a mistake. They are secure in their freedom to learn by trial and errorto learn by doing.



Of course, an important part of the socialization experience connected with food is eating together.



Children love to eat and chat. They share ideas as well, as the food they've prepared.



Working together, children learn. They see cooking as "real work" and they feel grown up as they acquire skills and become successful. It teaches independence.



Stuart needs assistance pouring boiling water, but after that, he's on his own making jello.



An even better beginning cooking project is instant pudding. The directions are simple. Even very young children can remember them. Empty the mix into the bow. Add 2 coups milk, mix, and refrigerate.



The only help mother needed to provide was a little "bowl holding" and door opening. And perhaps she was opening the door to more than the refrigerator. She was opening the door to a whole series of "growing up" experiences. She is opening the door to feelings of importance.



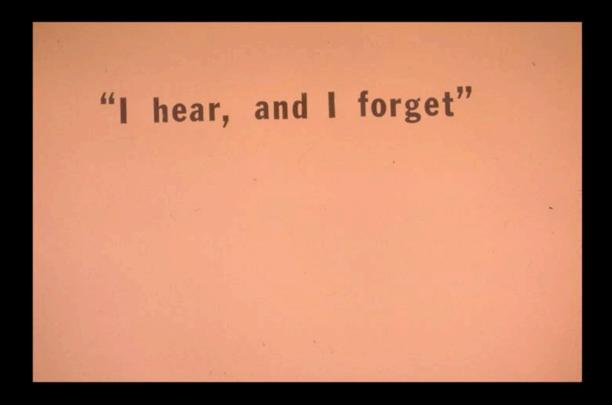
"I am important."



"I can do something."



"I can do real grown up work."



There is an old Chinese proverb that is appropriate when it comes to providing learning experiences for children. The proverb is: "I hear, and I forget,...

```
"I hear, and I forget"

"I see, and I remember"
```

I see, and I remember,...

```
"I hear, and I forget"

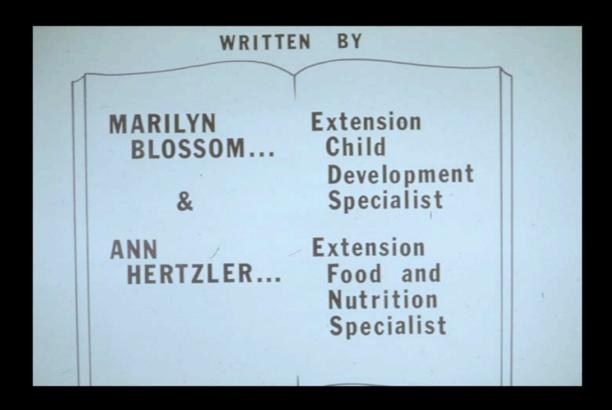
"I see, and I remember"

"I do, and I understand"
```

I do, and I understand."



The food curriculum is a "doing" curriculum.



(MUSIC)



(MUSIC)